

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------------------|----------------------|---------------------------|------------------|
| 10/549,521 | 09/19/2005 | Jeffrey Allen | 15892.10 | 1343 |
| 22913 WORKMAN N | 7590 11/15/2007 JYDEGGER | EXAMINER | | |
| 60 EAST SOUTH TEMPLE | | | ARGENBRIGHT, TONY MICHAEL | |
| 1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111 | | | ART UNIT | PAPER NUMBER |
| | , | | 3747 | |
| | | | | r |
| | | • | MAIL DATE | DELIVERY MODE |
| | | | 11/15/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | Application No. | Applicant(s) | | | |
|---|---|--|---|--|--|--|
| Office Action Summary | | | | | | |
| | | 10/549,521 | ALLEN, JEFFREY | | | |
| | | Examiner | Art Unit | | | |
| | | T. M. Argenbright | 3747 | | | |
| | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| WHIC - Exter after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. In period for reply is specified above, the maximum statutory period or to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICAT 36(a). In no event, however, may a reply by will apply and will expire SIX (6) MONTHS to cause the application to become ABANDO | ION. se timely filed from the mailing date of this communication. ONED (35 U.S.C. § 133). | | | |
| Status | | | | | | |
| 1) 🛛 | Responsive to communication(s) filed on 19 Se | eptember 2005. | | | | |
| 2a)□ | This action is FINAL . 2b)⊠ This action is non-final. | | | | | |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposit | ion of Claims | | | | | |
| 4)🖂 | Claim(s) 10-17 is/are pending in the application | n. | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) | Claim(s) is/are allowed. | | | | | |
| • | D⊠ Claim(s) <u>10,11,13,15 and 16</u> is/are rejected. | | | | | |
| | ☑ Claim(s) <u>12,14 and 17</u> is/are objected to. | | | | | |
| 8) | Claim(s) are subject to restriction and/o | r election requirement. | | | | |
| Applicat | ion Papers | | • | | | |
| 9)⊠ | The specification is objected to by the Examine | r. | | | | |
| 10)⊠ The drawing(s) filed on <u>19 September 2005</u> is/are: a) accepted or b)⊠ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority (| under 35 U.S.C. § 119 | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of: | | | | | | |
| | 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Coo the attached detailed embe determent in a list of the defined depicts not received. | | | | | | |
| | • | | | | | |
| Attachmen | | · | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice | 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date | | | | | |
| · — | mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date <u>9/25/06</u> . | 6) Other: | татт ателт пррпоатоп | | | |
| C O-ttd 7 | radamatk Office | | | | | |

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DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.84(m) because solid black shading has been used in Figures 2-5. Figure 1 should be designated by a legend such as "Prior Art" because only that which is old is illustrated, MPEP 608.02(g). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Engine Management System".

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10,11, 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Dixon et al. In paragraph [0014], Dixon et al discloses that the engine control system may use the cylinder pressure sensor output to determine crankshaft position of the engine. In paragraph [0016], it is disclosed that data is collected during the life of the engine which would inherently establish an operation history.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dixon et al in view of Wlodarczyk et al (WO 98/35210). Dixon et al does not disclose the type of sensor used, but in paragraph [0012] states they are well-known in the art. It would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Dixon et al to use the deformable-type pressure sensor of Wlodarczyk et al, since it has been recognized in the art as suitable for use in an engine control system.

Allowable Subject Matter

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Claims 12, 14 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The combustion pressure responsive systems made of record and not relied upon are considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. M. Argenbright whose telephone number is 571-272-4837. The examiner can normally be reached M-Th 6:30am-3:00pm and alt. Fridays 6:30am-2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen K. Cronin can be reached on 571-272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

The Un Lot T. M. Argenbright Primary Examiner Art Unit 3747